

DSM/DSM + Bromophenol Blue (Special Diluent for Microplates)

355-4282
355-3784

DEFINITION

With this special diluent for microplates, dilutions can be made from fresh, brackish or sea water. This diluent is used specifically for the inoculation of *Enterococci* microplates (MUD/SF) and *E. coli* microplates (MUG/EC).

The DSM in a ready-to-use format of 18 ml is intended for the simultaneous dilution of both *Enterococci* and *E. coli* microplates.

The bromophenol blue solution is only used to color the DSM blue, to avoid confusing it with distilled water and to facilitate the repartition into the wells of the microplate.

STANDARDS

WATER

- **NF EN ISO 7899-1 (March 1999):** Water quality - Detection and enumeration of intestinal *Enterococci* in surface and residual water - Part 1: Miniaturized method (Most Probable Number) by inoculation in liquid medium
- **NF EN ISO 9308-3 (March 1999):** Water quality - Detection and enumeration of *Escherichia coli* and of coliform bacteria in surface and residual water - Part 3: Miniaturized method (Most Probable Number) by inoculation in liquid medium
- **NF T90-461/A2 (May 2007):** Water quality - Microbiology - Quality control of culture media

PRESENTATION

- **Ready to use**
18 ml x 60 tubes **code 355-4282**
- **Dehydrated**
100 g **code 355-3784**

STORAGE

- Ready to use: +15-25°C
- Dehydrated: +15-25°C, in carefully-sealed bottles in a cool, dry place
- Expiration date and batch number are shown on the package

THEORETICAL FORMULA

Sea salt	22.5 g
Bromophenol blue solution (only in 18 ml-tube format)	10 ml
Distilled water	1,000 ml
Final pH (25°C) before autoclaving =	7.0 ± 0.2

EQUIPMENT REQUIRED (NOT SUPPLIED) (non-exhaustive)

- Tubes for dispensing DSM (for dehydrated DSM preparation) (10 and 20 ml)
- Pipettes
- Bunsen burner
- Autoclave
- All usual laboratory equipment

PREPARATION OF DEHYDRATED MEDIUM

Always shake well before use.

Dissolve 22.5 g of powder in 1 liter of distilled water. Mix until a homogenous suspension is obtained. Adjust the pH to 7.0 ± 0.2. Dispense (9 ml/tube) and sterilize in autoclave at 121°C ± 3°C for 20 minutes.

PROTOCOL

- **DSM in 9 ml tube** (prepared using DSM dehydrated code 355-3784)
See the instruction leaflet inserted in the *Enterococci* microplate boxes (MUD/SF codes 355-3783 and 355-3786) and the *E.coli* microplate boxes (MUG/EC codes 355-3782 and 355-3785).
- **DSM Ready-to-use 18 ml** (code 355-4282)
The DSM ready-to-use in 18 ml allows simultaneous dilutions to be carried out the *Enterococci* and *E.coli* microplates. In order to perform a series of dilutions (simultaneously) for the 2 tests, add 18 ml of the water sample in a first 18 ml DSM tube, homogenize and carry out the series of dilutions, transferring 2 ml of the previous dilution into a new DSM 18 ml tube.

PRECAUTIONS

- The DSM dehydrate medium is hygroscopic.
- The salinity of the solution may cause the presence of crystals at the bottom of the 18 ml ready to use DSM (code 355-4282). Shake tubes well before use.
- Comply with Good Laboratory Practice.

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V3-10/12/10

PERFORMANCES/QUALITY CONTROL OF THE TEST

The performances of this diluent are verified with physico-chemical tests: pH, salinity and sterility.

QUALITY CONTROL OF MANUFACTURER

Every product manufactured and marketed by Bio-Rad is subject to a quality-assurance procedure at all stages, from the reception of raw materials to the marketing of the end-product.

Each batch of finished product undergoes quality control and is marketed only if it satisfies the acceptability criteria.

Documentation relative to the production and control of each batch is kept on file.

KEY WORDS

DSM/*Enterococci*/*Escherichia coli*/Coliforms/
Water/Fluorescence/Microplate/Diluent